

Title (en)

HELICAL PERMANENT MAGNET STRUCTURE AND UNDULATOR USING THE SAME

Title (de)

SPIRALFÖRMIGE PERMANENTMAGNETSTRUKTUR UND UNDULATOR MIT VERWENDUNG DAVON

Title (fr)

STRUCTURE D'AIMANT PERMANENT HÉLICOÏDAL ET ONDULEUR UTILISANT CELLE-CI

Publication

EP 3454628 B1 20220406 (EN)

Application

EP 18188819 A 20180814

Priority

US 201715697481 A 20170907

Abstract (en)

[origin: EP3454628A1] A helical permanent magnet structure includes at least one magnet assembly. The magnet assembly includes a plurality of permanent magnets and poles. The permanent magnets are with a magnetization direction, and formed as helical shape and arranged as a helical surface, the center of the helical surface has a longitudinal passage for being passed through by a charged particle. The poles are with the same amount of the permanent magnets, wherein the poles are magnetized by the permanent magnets and absorb on one side of the permanent magnets.

IPC 8 full level

H05H 7/04 (2006.01)

CPC (source: CN EP KR US)

H01F 7/0221 (2013.01 - KR); **H01F 7/0278** (2013.01 - KR US); **H05H 7/04** (2013.01 - CN EP KR US); **H05H 9/00** (2013.01 - KR); **H05H 13/04** (2013.01 - US); **H01S 3/0903** (2013.01 - US); **H05H 2007/041** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3454628 A1 20190313; **EP 3454628 B1 20220406**; CN 109475038 A 20190315; JP 2019050194 A 20190328; JP 6566221 B2 20190828; KR 102060252 B1 20191227; KR 20190027718 A 20190315; TW 201914371 A 20190401; TW I684387 B 20200201; US 10485089 B2 20191119; US 2019075646 A1 20190307

DOCDB simple family (application)

EP 18188819 A 20180814; CN 201810866063 A 20180801; JP 2018156655 A 20180823; KR 20180098689 A 20180823; TW 107126839 A 20180802; US 201715697481 A 20170907